

## Appendix S1. Search Strategy

### (1) Electronic Searches

Following electronic databases were searched using the OvidSP search platform:

- MEDLINE (1946 to January (week 2) 2012);
- EMBASE (1974 to January (week 2) 2012);
- CNKI (1979 to September (week 2) 2012);
- SinoMed ( 1979 to September (week 2) 2012).

#### (1-1) MEDLINE

- #1 explode “Hepatitis B”/ all subheadings or explode “Hepatitis B virus”/ all subheadings
- #2 hepatitis b or hepatitis-b or (type b adj1 hepatitis) or hbv or hep b or hbsag or hbs-ag or hbs antigen\* or hbs-antigen\* or hepatitis b surface antigen\* or hepatitis-b surface antigen\*
- #3 “Alanine Transaminase”/ all subheadings
- #4 alanine transaminase\* or alanine aminotransferase\* or glutamic pyruvate transaminase\* or ALT or ALAT or GPT or SGPT
- #5 “Hepatitis B e Antigens”/ all subheadings
- #6 hbeag or hbe-ag or hbe antigen\* or hbe-antigen\* or (hepatitis b adj3 e antigen\*) or (hepatitis-b adj3 e antigen\*) or ((type b adj1 hepatitis) adj3 e antigen\*) or (hbv adj3 e antigen\*)

- #7 “DNA, viral”/ all subheadings or “Virus replication”/ all subheadings
- #8 dna or replication\* or viral titre or viral titer or viral load
- #9 “Liver Cirrhosis”/ all subheadings
- #10 cirrho\* or ((liver or hepat\*) adj3 fibro\*)
- #11 “Carcinoma, Hepatocellular”/ all subheadings
- #12 ((liver or hepat\*) adj3 (cancer\* or carcinom\* or neoplasm\* or malign\* or tumo?r\*)) or hcc or hepatoma
- #13 “Age Factors”/ all subheadings
- #14 age adj5 infect\*
- #15 “Infectious Disease Transmission, Vertical”/ all subheadings
- #16 perinatal or peri-natal or vertical or MTCT or mother-to-child or mother to child or mother-child or mother child or mother-to-infant or mother to infant or mother-infant or mother infant or maternal-to-child or maternal to child or maternal-child or maternal child or maternal-to-infant or maternal to infant or maternal-infant\* or maternal infant or adult-to-child or adult to child or adult-child or adult child or adult-to-infant or adult to infant or adult-infant or adult infant or maternal-f?etal or maternal f?etal or f?etomaternal
- #17 postnatal or post-natal or horizontal or child-to-child or child to child or child-child or child child or sibling-to-sibling or sibling to sibling or

sibling-sibling or sibling sibling or between children or between siblings or  
between family or within household

#18 “Birth Order”/ all subheadings

#19 birth adj3 (order\* or link\*)

#20 (serolog\* or seropositiv\* or serostatus) adj5 (famil\* or parent\* or father\* or  
paternal or mother\* or maternal or sibling\* or brother\* or sister\*)

#21 (hepatitis b or hepatitis-b or (type b adj1 hepatitis) or hbv or hep b or hbsag or  
hbs-ag or hbs antigen\* or hbs-antigen\* or hepatitis b surface antigen\* or  
hepatitis-b surface antigen\*) adj5 (famil\* or parent\* or father\* or paternal or  
mother\* or maternal or sibling\* or brother\* or sister\*)

#22 #1 or #2

#23 #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12

#24 #13 or #14

#25 #15 or #16 or #17

#26 #18 or #19

#27 #20 or #21

#28 #22 and #23 and #24

#29 #22 and #23 and #25

#30 #22 and #23 and #26

#31 #22 and #23 and #27

#32 #28 or #29 or #30 or #31

(1-2) EMBASE

- #1 “hepatitis B”/ all subheadings or “hepatitis b B virus”/ all subheadings
- #2 hepatitis b or hepatitis-b or (type b adj1 hepatitis) or hbv or hep b or hbsag or hbs-ag or hbs antigen\* or hbs-antigen\* or hepatitis b surface antigen\* or hepatitis-b surface antigen\*
- #3 “alanine aminotransferase”/ all subheadings
- #4 alanine transaminase\* or alanine aminotransferase\* or glutamic pyruvate transaminase\* or ALT or ALAT or GPT or SGPT
- #5 “hepatitis B(e) antigen”/ all subheadings
- #6 hbeag or hbe-ag or hbe antigen\* or hbe-antigen\* or (hepatitis b adj3 e antigen\*) or (hepatitis-b adj3 e antigen\*) or ((type b adj1 hepatitis) adj3 e antigen\*) or (hbv adj3 e antigen\*)
- #7 “virus DNA”/ all subheadings or “virus replication”/ all subheadings
- #8 dna or replication\* or viral titre or viral titer or viral load
- #9 “liver cirrhosis”/ or “decompensated liver cirrhosis”/ all subheadings
- #10 cirrho\* or ((liver or hepat\*) adj3 fibro\*)
- #11 “liver cancer”/ or “ascites hepatoma”/ or “liver carcinoma”/ or “liver cell carcinoma”/ all subheadings
- #12 (liver or hepat\*) adj3 (cancer\* or carcinom\* or neoplasm\* or malign\* or tumo?r\*) or hcc or hepatoma

- #13 “age”/ all subheadings
- #14 age adj5 infect\*
- #15 “vertical transmission”/ all subheadings
- #16 perinatal or peri-natal or vertical or MTCT or mother-to-child or mother to child or mother-child or mother child or mother-to-infant or mother to infant or mother-infant or mother infant or maternal-to-child or maternal to child or maternal-child or maternal child or maternal-to-infant or maternal to infant or maternal-infant or maternal infant or adult-to-child or adult to child or adult-child or adult child or adult-to-infant or adult to infant or adult-infant or adult infant or maternal-f?etal or maternal f?etal or f?etomaternal
- #17 postnatal or post-natal or horizontal or child-to-child or child to child or child-child or child child or sibling-to-sibling or sibling to sibling or sibling-sibling or sibling sibling or between children or between siblings or between family or within household
- #18 “birth order”/ all subheadings
- #19 birth adj3 (order\* or link\*)
- #20 (serolog\* or seropositiv\* or serostatus) adj5 (famil\* or parent\* or father\* or paternal or mother\* or maternal or sibling\* or brother\* or sister\*)
- #21 (hepatitis b or hepatitis-b or (type b adj1 hepatitis) or hbv or hep b or hbsag or hbs-ag or hbs antigen\* or hbs-antigen\* or hepatitis b surface antigen\* or

hepatitis-b surface antigen\*) adj5 (famil\* or parent\* or father\* or paternal or mother\* or maternal or sibling\* or brother\* or sister\*)

#22 #1 or #2

#23 #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12

#24 #13 or #14

#25 #15 or #16 or #17

#26 #18 or #19

#27 #20 or #21

#28 #22 and #23 and #24

#29 #22 and #23 and #25

#30 #22 and #23 and #26

#31 #22 and #23 and #27

#32 #28 or #29 or #30 or #31

### (1-3) CNKI

(关键词=乙肝 or 乙型肝炎 or HBV or HBsAg or 乙肝表面抗原) AND (关键词=ALT or 丙氨酸氨基转移酶 or HBeAg or 乙肝核心抗原 or 肝癌 or 肝细胞癌 or 肝硬化 or 肝纤维化 or HBVDNA or HBV-DNA) AND (关键词=年龄 or 出生顺序分析 or 垂直传播 or 水平传播 or 家庭)

### (1-4) SinoMed

- 1.主题词:肝炎, 乙型, 慢性/全部树/全部副主题词 -限定:-
- 2.全部字段:乙肝 -限定:-

- 3.全部字段:乙型肝炎 -限定:-
- 4.全部字段:HBV -限定:-
- 5.全部字段:hbsag -限定:-
- 6.主题词:丙氨酸转氨酶/全部树/全部副主题词 -限定:-
- 7.全部字段:ALT -限定:-
- 8.全部字段:丙氨酸氨基转移酶 -限定:-
- 9.主题词:肝炎 e 抗原, 乙型/全部树/全部副主题词 -限定:-
- 10.全部字段:HBeAg -限定:-
- 11.全部字段:乙肝 e 抗原 -限定:-
- 12.主题词:病毒复制/全部树/全部副主题词 -限定:-
- 13.全部字段:DNA -限定:-
- 14.全部字段:复制 -限定:-
- 15.全部字段:病毒滴度 -限定:-
- 16.全部字段:病毒载量 -限定:-
- 17.主题词:肝硬化/全部树/全部副主题词 -限定:-
- 18.全部字段:肝纤维化 -限定:-
- 19.主题词:肝肿瘤/全部树/全部副主题词 -限定:-
- 20.主题词:年龄因素/全部树/全部副主题词 -限定:-
- 21.主题词:疾病传播, 垂直/全部树/全部副主题词 -限定:-
- 22.全部字段:母婴传播 -限定:-
- 23.主题词:疾病传播, 水平/全部树/全部副主题词 -限定:-
- 24.全部字段:水平传播 -限定:-

25.主题词:出生顺序/全部树/全部副主题词 -限定:-

26.全部字段:出生顺序分析 -限定:-

27.主题词:家庭/全部树/全部副主题词 -限定:-

28.#5 or #4 or #3 or #2 or #1 -限定:-

29.#19 or #18 or #17 or #16 or #15 or #14 or #13 or #12 or #11 or #10 or #9 or #8 or  
#7 or #6 -限定:-

30.#24 or #23 or #22 or #21 -限定:-

31.#29 and #28 and #20 -限定:-

32.#26 or #25 -限定:-

33.#30 and #29 and #28 -限定:-

34.#32 and #29 and #28 -限定:-

35.#29 and #28 and #27 -限定:-

36.#35 or #34 or #33 or #31 -限定:-

## (2) Additional Searches

Additional studies were sought manually by checking reference lists of all included papers. None of the searches were restricted by date, language or publication status.



